Ministry of the Environment

Celebrating 40 Years (1972 to 2012)

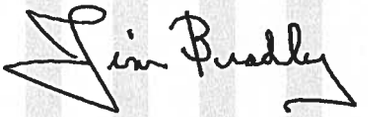
Ontario

Minister's Message

Much has changed in the 40 years since the Ministry of the Environment was established. Today, there's a much greater understanding at all levels, from government to business to the public, of the importance of protecting and sustaining our water, air and land, and supporting a clean environment.

But one thing that hasn't changed is the passion, excellence and commitment to protecting our environment displayed by each and every member of the team here at the ministry.

It is privilege to lead this team and I look forward to building on the great legacy of the past 40 years together.



Minister Jim Bradley

Deputy's Message

Over the past year, the Ministry of the Environment has commemorated our 40th anniversary and celebrated our history. We can be proud of our many achievements. Now the time has come to look forward to the journey ahead and the changes and challenges of tomorrow.

As a member of the team here at the ministry, you can be proud of the work you do to enable and empower the people of Ontario to make the best choices for the environment.

This booklet contains snapshots of the ministry's first four decades, and sets the stage as we focus on adding to our history of accomplishments in the future.

Working together, we can achieve our vision of a healthy environment for a strong Ontario.

Gail Beggs

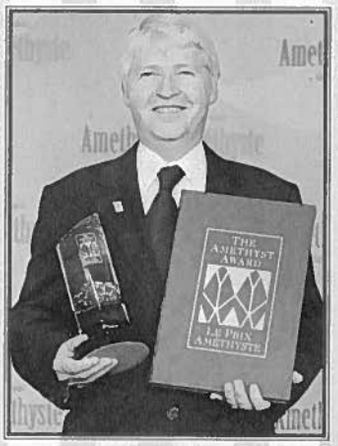
Gail Beggs
Deputy Minister

Ministry of the Environment's 40th Anniversary Celebrations

The 40th year celebrations were formally launched in April 2012 by Minister Jim Bradley and Deputy Minister Gail Beggs. Throughout the year, the accomplishments of staff and their commitment to environmental protection – both past and present – were highlighted at various events.

Amethyst Awards

Established in 1992, the annual Amethyst Awards recognizes outstanding achievement by Ontario's Public Servants. At this year's ceremony, both individuals and teams within the Ministry of the Environment were acknowledged for their achievements, including Dr. Ray Clement, recipient of the Sandra D. Lang Lifetime Achievement Award.



Amethyst Awards | Prix Améthyste

Emerald Awards

Recognizing Ministry of the Environment staff who go 'above and beyond' to protect the environment, the Emerald Awards ceremony also recognized four individuals for their 40 years of dedicated service to protecting Ontario's environment.

THE EMERALD AWARDS

Crystal Awards

Drinking Water Management Division's (DWMD) Crystal Awards recognize those individuals and teams whose work strengthen any or all DWMD key priorities. At the 2012 awards in September, the 40th Anniversary was marked by a number of events.

Resources Road 40th Anniversary Event

The Resources Road 40th Anniversary Event, held on September 27, was attended by well over 100 retired/former MOE staff – including a number of former ADMs – along with over 150 current staff. The event celebrated the ministry's 40 years of environmental protection in Ontario, re-connected old friends and provided the opportunity to look towards the future.

Best in Science Symposium: 40 years of Science at MOE

The first Best in Science Symposium was held on May 30 and 31 to encourage and promote scientific research that supports MOE's mandate of a healthy environment for a strong Ontario. MOE retirees, David Balsillie, Dennis Corr and Dave McLaughlin, along with Ray Clement, discussed *Forty Years of Science Advances at MOE.*

Good science and solid reliable data are the foundations of decision-making and the development of standards, policy and legislation. Good science allows us to keep the public informed about the state of their environment. As a result of good science, many activities have been undertaken and accomplished by the Ministry of the Environment.

- Dr. David Balsillie

Jubilee Medal Ceremony

February 6, 2012 marked Her Majesty the Queen's 60 years on the Throne and as Queen of Canada. To mark the occasion, a commemorative medal was created to recognize Canadians for their support and services to their fellow citizens. A certain number of medals were allocated to Peace Officers.

Minister Bradley and Deputy Beggs awarded the peer-nominated Jubilee Medals to MOE Provincial Officers on March 27, 2013.

Creation of the Ministry of the Environment:

Ontario Water Resources Commission (OWRC) and the Department of the Environment

Created in 1956, the Ontario Water Resources Commission (OWRC) was the first organization of its kind in the world. The Commission had general supervisory and regulatory authority over water quality and use within the province, as well as various approval and pollution abatement powers. In addition, the OWRC also financed, constructed and operated supply water and sewage plants to municipalities.

The OWRC was internationally respected for its leadership in water and waste water treatment facilities and research, and influenced actions on the part of Canada, neighbouring states and provinces to address transboundary water quality and quantity issues.

In 1971, the Department of the Environment was created with the responsibility for environmental protection, and worked in parallel with the OWRC. A year later in April 1972, the two organizations merged and the Ministry of the Environment was formed.

In 1956, Dr. Albert Berry became the first general manager and chief engineer of the OWRC, building the organization into one of the most effective environmental government bodies in the world.

Dr. Berry's environmental leadership was recognized at the international level. He was president of American Water Works Association and the Water Environment Foundation, the sole individual to be elected president of both these organizations. Dr. Berry also received the Order of Canada for his contributions to environmental engineering.

Ontario's First Environmental Technicians

The first group of environmental technicians – later known as environmental officers (EOs) – were hired by the ministry in March 1973. In 1974 regional offices were created and EOs worked in separate functions such as municipal and private abatement or industrial abatement.

In the early 1980s, EOs were officially recognized as provincial officers and received legal training at the Ontario Police College. The separate abatement functions were combined in 1984 and EOs started to have responsibility for all issues within a geographical area much like it is today.

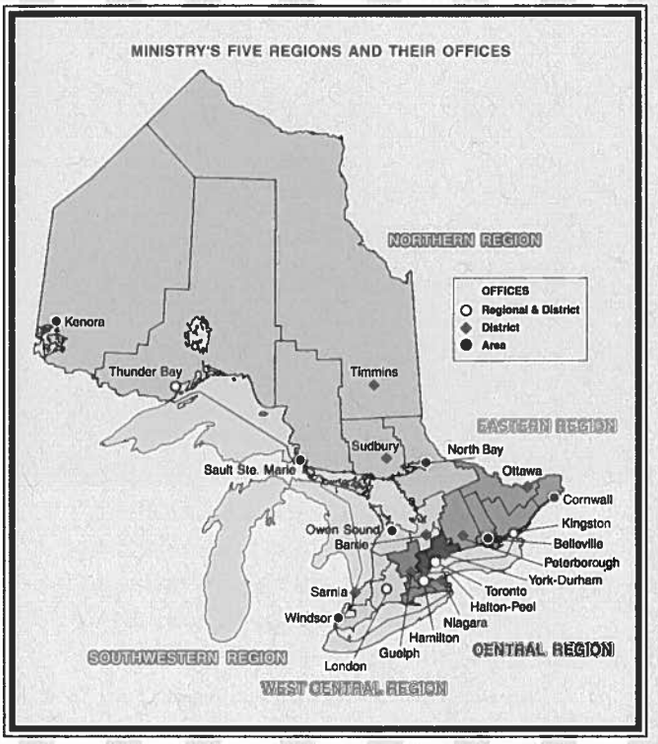
The Investigations and Enforcement Branch was formed in 1985 creating the well-defined distinction between the investigative and inspection functions of modern environmental officers. Today, inspections are carried out in two separate divisions and investigators are part of the Operations Division.

The ministry currently has over 800 badge-carrying Peace Officers designated as Provincial Officers. The role of most of these officers relates to front line inspection and investigative activities.

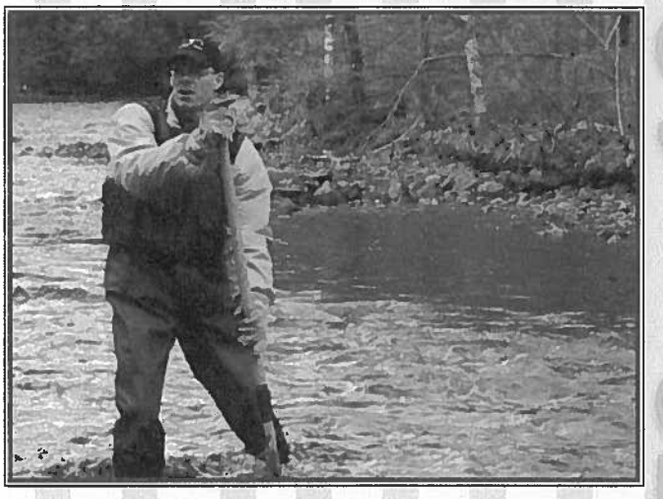
Creation of Regional Offices

Ontario covers a vast area that is larger than Austria, Belgium, Denmark, Greece, Ireland and Portugal combined. In 1974, the ministry divided the province into six regions and opened up district and area offices to provide local environmental action and protection.

While the two original northern offices have since been combined to form one regional office, our regional and district/area offices boast professionals who are experts in the environmental characteristics and demands of their own corner of the province.



Dorset Environmental Science Centre (DESC)



DESC was established in the mid-1970s under the scientific leadership of Dr. Peter Dillon in response to the need for scientifically defensible regulations to limit cottage development. Through atmospheric, terrestrial and aquatic-ecosystem monitoring programs, DESC scientists contributed to the research on acid rain in Ontario.

Through the late 1970s and 1980s, DESC monitoring and research of acid rain contributed to the development of environmental regulations for reducing sulphur emissions across North America. Beginning in the mid-1990s, research at DESC evolved to focus on the multiple and interacting environmental stressors that affect lakes.

Located on Paint Lake near Dorset, the Centre is now part of the Biomonitoring Section of the Environmental Monitoring and Reporting Branch, and continues to serve as the ministry's centre of expertise on water quality related issues for Ontario's inland lakes.

Mississauga Train Derailment

On the evening of November 10, 1979, a freight train carrying dangerous chemicals derailed in Mississauga. An explosion soon followed and clouds of potentially deadly chlorine gas were released and created a fireball that could be seen in Kingston. This was the first time the ministry used its mobile Trace Atmospheric Gas Analyzer (TAGA) to monitor air quality during an emergency. Officials acted quickly and evacuated nearly 250,000 people – at the time the largest peacetime evacuation in North America.

A command team of municipal, regional and provincial representatives with support from numerous agencies, volunteers and residents ensured that there were no fatalities, few injuries, little property damage, and that public confidence was maintained.

The so-called "Miracle of Mississauga" led to legislative changes regarding the safe transportation of dangerous goods and provided an example for the development of emergency planning around the world, including our own emergency response program (ERP).

Spills Action Centre

The ministry's regulatory mandate for spills arises largely out of Part X of the Environmental Protection Act, which requires the prompt reporting of spills. To support this requirement, the Spills Action Centre (SAC) was opened on November 29, 1985 as a 24-hour, seven-day-a-week, province-wide toll-free service for receiving, evaluating and initiating responses to spills and other immediate environmental threats.

SAC officers are badge-carrying provincial officers who work in cooperation with numerous provincial, municipal and national agencies to quickly coordinate containment and clean-up.

When an emergency requires additional MOE support beyond those available at the regional and district levels of Operations Division, the ministry may call upon the following resources:

- The Drinking Water Management Division assists when spills or spill emergencies threaten drinking water supplies.
- The Environmental Monitoring and Reporting Branch provides on-site specialized air monitoring, meteorology, terrestrial assessment (soil and vegetation), as well as air and water modelling support.
- The Standards Development Branch provides information on chemical and physical properties of contaminants and pesticides in addition to expertise on toxicology and air and water standards.
- The Laboratory Services Branch conducts rapid analysis of samples, important for making decisions regarding response actions and clean-up procedures.
- The Waste Management Policy Branch advises on the safe transportation and disposal of wastes from spills and emergencies.
- The Communications Branch provides communications support beyond that which is available at regional offices.

The Blue Box

What could be easier than tossing materials into a box, carrying the box to the curb, and watching a truck take the materials away? Jack McGinnis thought that it was a pretty good idea.

Known as Ontario's "Father of the blue box", Jack formed the community based non-profit group Is Five Foundation and in 1974 organized Canada's first curb side pick-up of recyclables in Toronto's Beaches neighbourhood. Jack had revolutionized residential recycling.

Combined efforts of many public and private sector partners over the following years led to the first full-scale community blue box project being launched in 1981 with 1,500 households in Kitchener. In 1983, with the support of its citizens, the City of Kitchener implemented the blue box program city-wide. In June 1986, the City of Mississauga implemented the second commercial blue box program in Ontario and, in doing so, launched the largest recycling effort in North America.

In the late 1980s and early 1990s, the province and industry made major commitments to expand municipal recycling programs and shift the focus of waste management away from disposal. In 1987, the Ontario Government launched the Municipal Recycling Support Program, in which the province, industry and municipalities each contributed one-third of the cost to implement municipal recycling programs. In 1994, the province introduced a regulation requiring municipalities with populations over 5,000 to operate a blue box program.

Today over 97 per cent of Ontario households have access to a blue box program. The Blue Box is widely regarded as an icon of recycling and one of the most recognized and accepted methods that individuals can use to protect the environment.

Countdown: Acid Rain

When Ontario's Countdown: Acid Rain program was introduced on December 17, 1985 it was greeted by an all-party standing ovation and the story made the front page of the New York Times the day after. Under the program, targets were established to reduce province-wide emissions of sulphur dioxide (SO2) from the 1980 base case level of about 1,760 kilotonnes (kt) to 885 kt by 1994.

While the program had a clear focus on four Ontario companies that were responsible for 80 per cent of the province's emissions – Inco, Falconbridge (both in Sudbury), Algoma Steel (Ore Division in Wawa) and Ontario Hydro – the initiative served the important role of showing Ontario's leadership and 'clean hands' as we sought to persuade the United States to take comparable action.

While Minister Jim Bradley – enjoying his first go-round at MOE – led the Ontario effort with the 'big four' companies, behind-the-scenes efforts of lobbyists and Prime Minister Brian Mulroney with Vice-President Bush and Democratic Senate Majority Leader, George Mitchell, put pressure on the Americans.

This landmark initiative set the stage for future Ontario programs. In 1998 Ontario signed on to the Canada-wide Acid Rain Strategy for Post-2000, committing to further reduce annual emissions of sulphur dioxide to below 442.5 kt by 2015. And in 2005, new targets were set for the "Countdown Companies" and an even wider range of Ontario sources in Ontario's Industry Emissions Regulation.

The results?

- November 15, 1990: President George Bush (Senior) passed amendments to the Clean Air Act, committing the United States to addressing the problem of acid rain
- 2004: Inco, Falconbridge, Algoma Steel's Ore Division (closed in 1998) and Ontario Hydro had cut their emissions from about 1,480 kt in 1980 to 356 kt.
- 2011: Inco, Falconbridge and Ontario Hydro had cut their emissions to 173 kt.

Hagersville Tire Fire

The Hagersville tire fire has been called the biggest co-ordinated emergency effort since the Mississauga train derailment in 1979. The following message from MOE Deputy at the time, Gary S. Posen, appeared in the April 1990 issue of the MOE's employee newsletter, Clean Talk.

Committed, dedicated, thoroughly professional. It's difficult to find one word to adequately describe the staff of this ministry.

In an emergency, such as the tire fire in the Hagersville area, even the combination of these words does not do justice to the enormous efforts put forth by so many of our staff.

People working 18 hours a day, seven days a week, battling a constantly changing situation under the critical eye of world-wide media. People continuing to work without taking breaks until the site safety officer forced them to eat or rest. People remaining cheerful, helpful, and sympathetic to one another and the local community in a most stressful time.

And those on site are not the only people deserving of recognition. 'Back at the ranch' many staff put in the extra effort to take up the slack when their colleagues were called to Hagersville.

To all of you – thank you.

Environmental Bill of Rights

The Environmental Bill of Rights (EBR) came into effect in February 1994 and is a significant environmental law that is unique to Ontario.

Recognizing that the people of Ontario have a shared goal to protect our natural environment, the EBR includes a formal framework that gives every citizen of Ontario the right to participate in environmental decision-making and to hold the government accountable for its decisions. A total of 14 ministries are subject to the EBR, each guided by a Statement of Environmental Values that informs decisions affecting the environment.

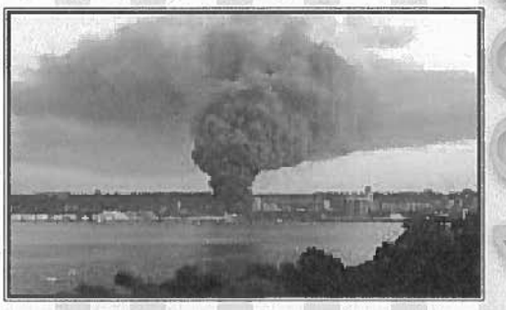
The EBR represents a new approach to environmental decision-making and public participation, citizen engagement and greater accountability of decision makers.

The Environmental Commissioner

The Environmental Commissioner of Ontario is the province's independent environmental watchdog, tasked with monitoring and reporting on the Government of Onvtario's compliance with the EBR.

Plastimet Fire

On the evening of Wednesday, July 9, 1997, a fire broke out at an old smelting factory in Hamilton which had been converted to a plastics recycling plant. In addition to the mercury used in the smelting process, the site also contained approximately 400 tonnes of plastics. The fire at the Plastimet plant quickly became the site of one of the largest Poly Vinyl Chloride (PVC) fires in North American history.



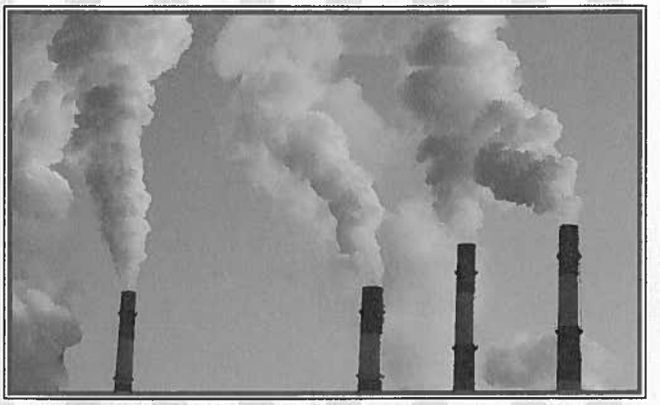
MOE's Spills Action Centre (SAC) was soon contacted and followed prescribed procedures to activate an MOE field response at the district and regional level. MOE mobile Trace Atmospheric Gas Analyzer (TAGA) staff were then dispatched to the scene to monitor the air for contaminants such as hydrogen chloride and vinyl chloride.

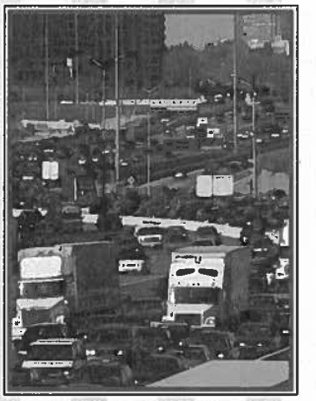
TAGA staff measured the air quality in the downtown core and over Hamilton Mountain. The air monitoring results in the downtown core were used to support the Local Medical Officer of Health's decision not to evacuate a nearby detention centre and hospital.

Concurrent with the air monitoring efforts, ministry staff examined the water in both the sewer upstream and downstream, as well as in fire runoff water and drains. By Saturday, intensive soil, vegetation and vegetable monitoring began and continued for several weeks after the fire was extinguished.

In total, MOE sampled over 200 sites and performed thousands of tests, informing appropriate response and restoration actions.

Introduction of the Anti-Smog Action Plan





Introduced in January 1998, the Anti-Smog Action Plan (ASAP) provided a unique forum for addressing smog in Ontario. More than 50 organizations representing government and industry (companies or organizations) signed the Anti-Smog Accord, an agreement endorsing a range of measures to reduce the total provincial emissions of Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOCs) by 45 per cent (from 1990 levels) by 2015.

Since the launch of ASAP, both regulatory and non-regulatory initiatives have been taken by all stakeholders, with the result that Ontario has seen substantial reductions in smog-causing emissions, including a 49 per cent reduction in emissions of nitrogen oxides from 1990 levels (as of 2011).

Air Quality in Ontario Reports

The ministry's Air Quality in Ontario Report for 2010 marked 40 years of long-term reporting on the state of air quality in Ontario. Ontario continues to benefit from one of the most comprehensive air monitoring systems in North America through the evolution of advanced technology and the progression of transparency to improve air quality for for the people of Ontario.

Protecting Ontario's Drinking Water

In May 2000, water contaminated by E. coli bacteria made its way into the municipal water system of the community of Walkerton. Within days, seven people had died and thousands of others had become ill from drinking the water.

As a result, the provincial government convened an inquiry led by Justice Dennis O'Connor. In 2002, Justice O'Connor released two reports including 121 recommendations to ensure safe water supply systems in Ontario. All of the recommendations were implemented through a framework based on a multi-barrier approach to water protection and improved transparency and accountability. This was accomplished through the following:

- Safe Drinking Water Act (2002)
- Appointment of the first Chief Drinking Water Inspector (2003)
- Creation of the Drinking Water Management Division (2004)
- Establishment of the Drinking Water Safety Net (2005)
- First annual report of the Chief Drinking Water Inspector and Clean Water Act (2006)
- First annual report of the Minister (2007)
- Municipal Drinking Water Licensing Program (2007)

Ontario's Drinking Water Safety Net includes eight facets of protection:

1. Source-to-tap focus
2. Strong legislative and regulatory framework
3. Regulated health-based standards
4. Regular and reliable testing
5. Swift, strong action on adverse water quality incidents
6. Mandatory licensing, operator certification and training
7. Multifaceted compliance improvement tool kit
8. Partnership, transparency and public engagement

Nutrient Management Act

The passing of the Nutrient Management Act in June 2002 heralded a first for Ontario – legislation creating comprehensive, enforceable, province-wide standards to regulate the storage and land application of nutrients.

Developed by the Ministry of the Environment and the Ministry of Agriculture and Food, the act provides a framework for setting clear and consistent standards for nutrient management on phased-in farms. In addition, these farms must develop nutrient management strategies and plans to ensure that nutrients are managed in an environmentally responsible manner to prevent contamination of lakes, streams and groundwater.

MOE is responsible for enforcing the act's standards, while the Ministry of Agriculture and Food is responsible for approvals, certification and licencing under the act and also ensures that the public is kept informed of new standards, as well as advancements in nutrient management practices and technologies.

Lake Simcoe Act

Lake Simcoe and its watershed are home to more than 350,000 people, wetlands, woodlands, wildlife and fish habitats, and support successful tourism and agricultural industries. Decades of human activity have significantly impacted water quality in the watershed and impaired its delicate ecosystem.

In December of 2008, the Lake Simcoe Protection Act became the first legislation in Canada to take an integrated watershed management approach to protecting and restoring a lake ecosystem. In the following spring, the Lake Simcoe Protection Plan was developed in consultation with citizens, municipalities, First Nations, and with the expert advice of scientists. The plan set a new standard for environmental protection of a watershed.

Thanks to the support of many dedicated partners, we are seeing improvements to the shoreline, including the lowering of phosphorus levels, which has helped to increase the level oxygen that fish need to survive.

Passage of the Cosmetic Pesticides Ban

Ontario's lawns, gardens, school yards and parks are a lot healthier since the province's cosmetic pesticides ban came into effect on Earth Day, April 22, 2009.

The use of pesticides to control weeds and insects for purely cosmetic reasons presents an unnecessary risk to humans and pets, especially when healthier lawns and gardens can be achieved without chemicals.

GOING PESTICIDE FREE
TIP: CLIPPINGS AND MULCH
Leaving grass clippings on your lawn provides nutrients and means less watering is needed. Add an mulch around your plants keeps moisture in, and reduces weeds and pests. Wood chips, leaves, compost, shredded newspaper or landscape cloth all make good mulch.
additup
Ontario

At the time of its introduction, the ban provided the most comprehensive restrictions on lawn and garden pesticides in North America. Within the first year of the ban, studies found levels of three pesticides commonly used for lawn care dropped about 80 per cent in urban streams.

Water Opportunities and Water Conservation Act

An important step to strengthening our leadership in water protection is the Water Opportunities and Water Conservation Act. Passed in 2010, the act establishes a path to help the people of Ontario further develop and market clean water technology and services, and conserve water. Municipalities will be enabled to improve the efficiency of municipal infrastructure and services, the people of Ontario will be provided with tools to reduce the amount of water they use and the government will work with industry partners to promote new technologies and services at home and abroad.

Green Pathways

The previous pages have provided a snapshot of how our understanding of the environment has deepened over the last 40 years. With this knowledge also comes the recognition that issues facing today's Ministry of the Environment are complex and require innovative ideas, and the participation of individuals, businesses and community groups from across Ontario.

In 2012, Deputy Minister Gail Beggs introduced Green Pathways, a plan that heralded a strategic shift for the ministry, adding to our traditional regulatory toolkit by embracing partnerships with individuals, businesses and communities to achieve environmental protection.

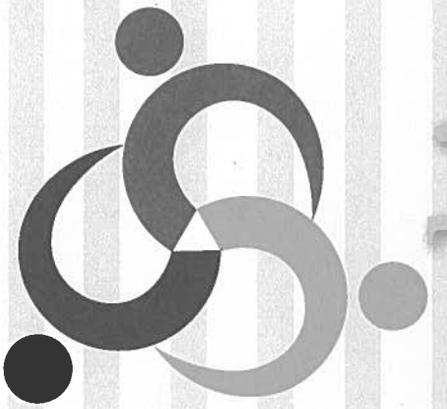
As we work with Ontarians, we will follow three pathways to shape our activities, guide the design of our work, and determine how we apply our resources to achieve our vision.

Each pathway operates synergistically with the others in ways that make the three together more powerful than any one by itself.

The achievements of the ministry's first 40 years would not have been possible without the commitment and wide ranging skill set of our staff from across the province. From our scientists, provincial officers, inspectors, and policy developers to those who provide legal expertise, translation services, and communications and administrative support, the Ministry of the Environment will continue to excel because of our people.

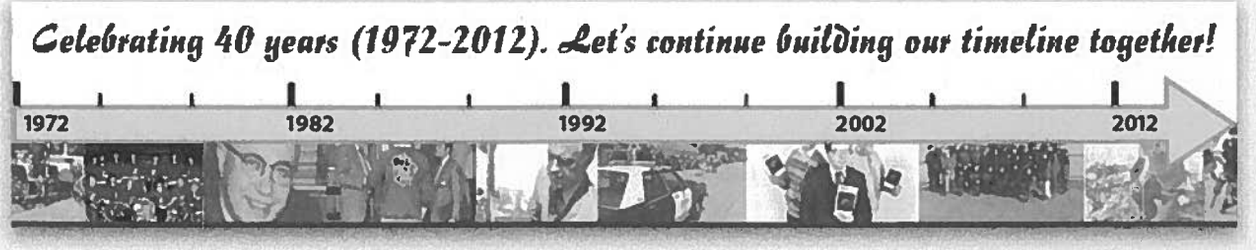
Together we will ensure, enable and empower ideas and actions that will secure a safe and healthy environment for the people of Ontario.

Enable new ideas and approaches
Empower people to make sound ecisions
Ensure environmental outcomes are achieved



Ministry of the Environment Timeline

At the start of our 40th year celebrations, a dedicated Intranet site was developed and staff from across the ministry were invited to add their own stories from the past 40 years. If you haven't visited the site recently, check out the latest content and add your own memory. Let's build the ministry's history together.



Celebrating 40 Years (1972 to 2012)

Ontario